

Anexo1. Tablas de Resumen de estadísticos a lo largo del año 2022

En este documento se presentan los resúmenes estadísticos mensuales de los datos de material particulado y gases monitoreados por la Red de Monitoreo de Calidad del Aire del Valle de Aburrá. Los resultados para todas las variables son reportados en $\mu g/m^3$, en condiciones de referencia; a excepción del NO_x se reporta en ppm.

Para el cálculo de excedencias, se consideran los niveles máximos permisibles establecidos en la Resolución 2254 de 2017 publicada por el Ministerio de Ambiente y Desarrollo Sostenible.

En las tablas presentadas se utilizan las siguientes convenciones:

- N.A: No Aplica. Corresponde a estaciones en las que no se obtuvo el 75 % de datos válidos para calcular los valores promedios correspondientes, o estaciones que no estaban operando durante el mes en consideración.
- CMD: Cantidad de muestras diarias.
- NEND: Número de excedencias a la norma diaria (PM10, PM2.5 y SO_2).
- NEN1H: Número de excedencias a la norma horaria (SO_2 , NO_2 y CO).
- NEN8H: Número de excedencias a la norma octohoraria (O_3).
- MAX, MEAN, MIN seguidos por -1H, -8H, -D: Valores máximos, medios y mínimos calculados para cada variable con diferente periodicidad(horaria, octohoraria y diaria); de acuerdo a lo establecido en el Protocolo para el Monitoreo y Seguimiento de la Calidad del Aire del Ministerio de Ambiente, Vivienda y Desarrollo Territorial.

Considerando los procedimientos propios del proceso de validación de datos establecidos dentro del sistema de gestión de calidad de la red de monitoreo, es posible que los resultados presentados en este informe varíen respecto a los reportados en meses anteriores.

1. Resumen Estadísticos 2022 para PM25

1.1. Resumen Estadísticos para estaciones en el municipio de Medellín

| | CEN-TRAF | MED-LAYE | MED-ALTA | MED-VILL | MED-BEME | MED-TESO | MED-SCRI | MED-ARAN | MED-SELE | MED-FISC |
|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Enero 2022 | | | | | | | | | | |
| CMD | 31 | 31 | 31 | 30 | 29 | 31 | 28 | 31 | 26 | 31 |
| MAX-D | 33 | 25.2 | 26.1 | 36 | 30.4 | 22.6 | 22 | 31 | 14.7 | 28.8 |
| MEAN-D | 27 | 18.9 | 19.8 | 18.8 | 21.4 | 17 | 16.2 | 20.2 | 10.9 | 23.7 |
| MIN-D | 20.3 | 11.7 | 12.7 | 13.5 | 12.2 | 11.6 | 8.7 | 13.4 | 5.3 | 17.2 |
| NEND | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Febrero 2022 | | | | | | | | | | |
| CMD | 25 | 28 | 28 | 28 | 27 | 28 | 28 | 28 | 28 | 28 |
| MAX-D | 54.8 | 50.7 | 41.9 | 43.1 | 38.2 | 44.6 | 36 | 43.9 | 26.4 | 50.8 |
| MEAN-D | 34 | 26.8 | 24.5 | 24 | 26.6 | 23.2 | 21.1 | 26 | 13.9 | 30.9 |
| MIN-D | 22.3 | 14.8 | 15.7 | 14.7 | 14.9 | 14.9 | 14.6 | 17.7 | 5.7 | 21.5 |
| NEND | 5 | 3 | 2 | 1 | 2 | 3 | 0 | 3 | 0 | 4 |

1.2. Resumen Estadísticos para estaciones en los municipios del Valle, diferentes a Medellín

| | ITA-CJUS | CAL-LASA | ITA-CONC | SUR-TRAF | CAL-JOAR | EST-HOSP | BAR-TORR | COP-CVID | BEL-FEVE | ENV-HOSP | SAB-RAME | GIR-EPM |
|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
| Enero 2022 | | | | | | | | | | | | |
| CMD | 31 | 27 | 27 | 31 | 31 | 31 | 27 | 31 | 31 | 31 | 27 | 31 |
| MAX-D | 35 | 27.2 | 25.5 | 38.2 | 26.6 | 23.8 | 17 | 19.1 | 18.3 | 22.5 | 23.7 | 22.6 |
| MEAN-D | 24.7 | 18.3 | 20.1 | 25.8 | 18.9 | 17.4 | 12.1 | 14.6 | 14.4 | 16.6 | 17.4 | 17.4 |
| MIN-D | 17.2 | 9.1 | 12.5 | 14.7 | 9 | 10 | 5.2 | 8.6 | 7.8 | 10.1 | 9.6 | 11 |
| NEND | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | ITA- CJUS | CAL- LASA | ITA- CONC | SUR- TRAF | CAL- JOAR | EST- HOSP | BAR- TORR | COP- CVID | BEL- FEVE | ENV- HOSP | SAB- RAME | GIR- EPM |
|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| Febrero 2022 | | | | | | | | | | | | |
| CMD | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 26 |
| MAX-D | 53.6 | 41.8 | 37.4 | 47.1 | 41.4 | 40.1 | 38.9 | 41.4 | 39.4 | 42.1 | 42.4 | 43.9 |
| MEAN-D | 34.4 | 24.2 | 24.6 | 33.8 | 24.8 | 23.7 | 17.7 | 20.5 | 20.1 | 22.4 | 24 | 22.5 |
| MIN-D | 24.4 | 11.8 | 16.5 | 22.9 | 13.1 | 14.3 | 8.5 | 11.4 | 12.3 | 12 | 14.1 | 12.9 |
| NEND | 8 | 3 | 1 | 9 | 3 | 1 | 1 | 1 | 1 | 2 | 2 | 2 |

1.3. Resumen Estadísticos para estaciones manuales

| | BEL- JEGA | MED- PJIC |
|---------------------|--------------|--------------|
| Enero 2022 | | |
| CMD | 9 | 9 |
| MAX-D | 26.7 | 27.2 |
| MEAN-D | 17.9 | 22.5 |
| MIN-D | 14.6 | 18.6 |
| NEND | 0 | 0 |
| Febrero 2022 | | |
| CMD | 8 | 9 |
| MAX-D | 26.1 | 42.8 |
| MEAN-D | 19.9 | 27.3 |
| MIN-D | 15.8 | 21.3 |
| NEND | 0 | 1 |

2. Resumen Estadísticos 2022 para PM10

| | MED- PJIC | CEN- TRAF | BEL- USBV | ITA- CONC | MED- EXSA | MED- ITMR | ITA- POGO | GIR- EPM |
|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| Enero 2022 | | | | | | | | |
| CMD | 31 | 31 | 30 | 27 | 24 | 31 | 30 | 26 |
| MAX-D | 47.4 | 63.8 | 37.7 | 42.7 | 54.2 | 47 | 64.2 | 54.3 |
| MEAN-D | 33.8 | 48.3 | 30.3 | 32 | 43.3 | 39.3 | 51.3 | 38.4 |
| MIN-D | 20 | 30.1 | 21 | 23.8 | 30.4 | 27.7 | 36.1 | 26.7 |
| NEND | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Febrero 2022 | | | | | | | | |
| CMD | 28 | 28 | 24 | 28 | 26 | 27 | 28 | 26 |
| MAX-D | 61.9 | 81.5 | 61.5 | 61.9 | 74.4 | 66.4 | 100 | 73.8 |
| MEAN-D | 41.1 | 56.3 | 37.7 | 42.6 | 53.2 | 47.5 | 61.8 | 45.8 |
| MIN-D | 29.6 | 39.2 | 26.2 | 31.7 | 41.4 | 32.1 | 39.5 | 30.4 |
| NEND | 0 | 2 | 0 | 0 | 0 | 0 | 3 | 0 |

2.1. Resumen Estadísticos para estaciones manuales

| | BAR- HSVP | CAL- JOAR | COP- HSMA | EST- MAGO | ITA- POGO | ITA- PTAR | MED- CORA | MED- MIRA | MED- PJIC | SUR- TRAF |
|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Enero 2022 | | | | | | | | | | |
| CMD | 10 | 9 | 10 | 9 | 10 | 10 | 10 | 10 | 10 | 10 |
| MAX-D | 28.2 | 40.2 | 42.8 | 63.5 | 52.8 | 34.4 | 36.5 | 27.3 | 49.2 | 53.9 |
| MEAN-D | 21.2 | 31.1 | 31.3 | 41.8 | 39.1 | 26.2 | 28.4 | 20.1 | 36.8 | 42.5 |
| MIN-D | 16 | 22.3 | 17.4 | 22.7 | 22.8 | 18.6 | 16 | 12.2 | 24.6 | 24.1 |
| NEND | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Febrero 2022 | | | | | | | | | | |

| | BAR- HSVP | CAL- JOAR | COP- HSMA | EST- MAGO | ITA- POGO | ITA- PTAR | MED- CORA | MED- MIRA | MED- PJC | SUR- TRAF |
|--------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|
| CMD | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| MAX-D | 48.2 | 55.7 | 62.5 | 69.5 | 84.9 | 49.3 | 49.1 | 43.4 | 65 | 73.9 |
| MEAN-D | 25.8 | 39.3 | 37.5 | 50 | 54.6 | 35.2 | 37.1 | 28.2 | 43.2 | 55.3 |
| MIN-D | 17.9 | 26.8 | 19.5 | 32.3 | 43.5 | 27.7 | 28.2 | 20.7 | 28.9 | 36.6 |
| NEND | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |

3. Resumen Estadísticos 2022 para CO

| | MED- PJC | GIR- EPM |
|--|-------------|-------------|
|--|-------------|-------------|

Enero 2022

| | | |
|---------|--------|--------|
| CMD | 31 | 30 |
| MAX-1H | 3991.3 | 5938 |
| MEAN-1H | 1276.9 | 205.6 |
| MIN-1H | 93.4 | 0.7 |
| NEN1H | 0 | 0 |
| MAX-8H | 2828 | 1021.1 |
| MEAN-8H | 1274.1 | 207 |
| MIN-8H | 317.6 | 14.9 |

| | MED- PJC | GIR- EPM |
|-------|-------------|-------------|
| NEN8H | 0 | 0 |

Febrero 2022

| | | |
|---------|--------|--------|
| CMD | 28 | 28 |
| MAX-1H | 4850.5 | 4053 |
| MEAN-1H | 1490.7 | 452.3 |
| MIN-1H | 38.4 | 29.5 |
| NEN1H | 0 | 0 |
| MAX-8H | 3298 | 1217.6 |
| MEAN-8H | 1491.8 | 450.3 |
| MIN-8H | 391.4 | 132 |
| NEN8H | 0 | 0 |

4. Resumen Estadísticos 2022 para Ozono

| | CAL- LASA | BEL- USBV | ITA- CONC | BAR- PDLA | MED- UDEM | MED- MIRA | MED- LAYE | MED- FISC | GIR- EPM |
|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| Enero 2022 | | | | | | | | | |
| CMD | 27 | 31 | 25 | 31 | 31 | 31 | 31 | 31 | 30 |

| | CAL- LASA | BEL- USBV | ITA- CONC | BAR- PDLA | MED- UDEM | MED- MIRA | MED- LAYE | MED- FISC | GIR- EPM |
|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| MAX-8H | 99.2 | 66 | 106.9 | 69.8 | 103.5 | 90.8 | 107.4 | 91 | 73.3 |
| MEAN-8H | 27.3 | 22.3 | 26.4 | 27.2 | 32.2 | 14.3 | 26.5 | 22.2 | 30.7 |
| MIN-8H | 0.1 | 0.5 | 0.2 | 3.3 | 4.8 | 0 | 1 | 2.4 | 5.5 |
| NEN8H | 0 | 0 | 2 | 0 | 2 | 0 | 4 | 0 | 0 |
| Febrero 2022 | | | | | | | | | |
| CMD | 28 | 23 | 28 | 28 | 28 | 20 | 28 | 28 | 27 |
| MAX-8H | 112.4 | 79 | 109.5 | 71.8 | 117 | 124.8 | 119.3 | 104.8 | 76.5 |
| MEAN-8H | 28 | 23.2 | 28.7 | 31.1 | 37.5 | 32.1 | 28.9 | 24 | 34.5 |
| MIN-8H | 0 | 0.5 | 0 | 2.9 | 4.3 | 0 | 1 | 2 | 5.4 |
| NEN8H | 18 | 0 | 13 | 0 | 17 | 5 | 14 | 3 | 0 |

5. Resumen Estadísticos 2022 para SO2

| | CEN- TRAF | GIR- EPM |
|---------------------|--------------|-------------|
| Enero 2022 | | |
| CMD | 31 | 6 |
| MAX-1H | 84.9 | 118.1 |
| MEAN-1H | 14.6 | 24.5 |
| MIN-1H | 2.4 | 0 |
| NEN1H | 0 | 1 |
| MAX-D | 26.7 | 36.4 |
| MEAN-D | 14.6 | N.A |
| MIN-D | 4.7 | 14.4 |
| NEND | 0 | 0 |
| Febrero 2022 | | |

| | CEN-TRAF | GIR-EPM |
|---------|----------|---------|
| CMD | 28 | N.A |
| MAX-1H | 74.8 | N.A |
| MEAN-1H | 11.5 | N.A |
| MIN-1H | 0.3 | N.A |
| NEN1H | 0 | N.A |
| MAX-D | 29.7 | N.A |
| MEAN-D | 11.4 | N.A |
| MIN-D | 6.2 | N.A |
| NEND | 0 | N.A |

6. Resumen Estadísticos 2022 para NO2

| | MED-PJIC | CEN-TRAF | ITA-CJUS | SUR-TRAF | MED-ITMR | MED-FISC | GIR-EPM |
|---------------------|----------|----------|----------|----------|----------|----------|---------|
| Enero 2022 | | | | | | | |
| CMD | 31 | 31 | 31 | 31 | 31 | 31 | 27 |
| MAX-1H | 86.5 | 191.2 | 88.1 | 87.8 | 68.7 | 91.6 | 86.6 |
| MEAN-1H | 29 | 39.7 | 29.3 | 38.7 | 23.6 | 34.7 | 17.4 |
| MIN-1H | 3 | 0 | 5 | 12.9 | 2.2 | 1.8 | 0 |
| NEN1H | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Febrero 2022 | | | | | | | |
| CMD | 28 | 28 | 27 | 25 | 27 | 28 | 13 |
| MAX-1H | 114.8 | 120.3 | 103.2 | 104 | 122.2 | 115.7 | 72 |
| MEAN-1H | 45.9 | 40.4 | 37.9 | 48.3 | 30.8 | 41 | 24 |
| MIN-1H | 8.7 | 0 | 12.4 | 17.8 | 5.7 | 1.7 | 2.1 |
| NEN1H | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

